



IN THE PATENT AND TM OFFICE

Art Unit: 3635

App. Number: 09/396,128

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Filing Date: 02/28/01

Applicant: Thompson, Thomas C.

App. Title: ~~Hurricane-Earthquake-Frieze-Plate~~

Examiner: Horton, Yvonne Michele

Faxed January 7, 2003

AMENDMENT A

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

This is a copy of the 15 pages sent to the Patent Office on 01/07/03. 13 of the original 15 pages were received by the fax machine. The last 3 were sent later that day. After the telephone call of 01/08/03 to the examiner, the applicant sent all 15 pages as per the examiners instructions on 01/11/03 but didn't receive reply post card until 04/07/03.

In response to the Office Action mailed 10/07/02, I have included in this response the following:

1. Response to claim rejections - 35 USC § 112.
2. Response to claim rejections - 35 USC § 102.
3. Response to claim rejections - 35 USC § 103.
4. Amended claims.
5. Clean copy of amended claims.
6. Certificate of faxing 15 pages to (703) 872-9326.

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Very respectfully,

Thomas C. Thompson

3635

ORIGINAL
COPY OF
PAGE #20

RESPONSE

1. **Claim 9 is rejected under 35 U.S.C. 112 as being indefinite...In claim 9 reference is made of the long end of the rectangular face is at the bottom. However, it is not clear what the "bottom" is referring. To meet the examiner's 112 objection, the applicant respectfully requests amending claim 9. Please change claim 9 from "said extension of said long end of said rectangular face is at the bottom." to "said extension of said rectangular face is on the lower, long dimension of said rectangular face." This makes it clear that the extension is on the lower part of the rectangular face and is on the long dimension of the rectangular face.**
2. **Claims 1-4, 6 and 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 3,423,898 to Tracy et al. In reference to claims 1 and 13, Tracy discloses the use of an apparatus (35) including a rectangular face (36) having right angled bend tabs (38) formed at a short end thereof and an extension (40) formed at a long end thereof. Tracy's apparatus is completely different from the applicant's invention, both in physical appearance and function. These physical differences are shown in the applicant's amended claims 1 and 13. The examiner has stated that Tracy's central portion 36, shown on his Fig. 7, is equivalent to the applicant's rectangular face 42A, shown on Fig. 14B. The examiner also states that Tracy's downwardly extending tabs 38 are equivalent to the applicant's rafter tabs 44A and 44B. The examiner additionally states that Tracy's upwardly extending tabs 40 are equivalent to the applicant's extension 42C. The applicant's invention is physically different from Tracy's apparatus because the applicant's extension 42C extends straight down from the rectangular face without the right angle bend shown between Tracy's central portion 36 and his upwardly extending tab 40. Also, Tracy's upwardly extending tabs 40 are parallel to each other, while the applicant's extension 42C and roof tab 38B are perpendicular to each other.**
3. **To show these physical differences in the claims, the applicant respectfully requests that the examiner amend claim 1d. Please change "an extension of one long end of said**

rectangular face.” to “one long end of said rectangular face extended in the same plane as said face forming an extension.” Claim 1 now states that the extension is extended in the same plane away from the long dimension of the rectangular face, without a right angle bend. Therefore, amended claim 1 now reads over Tracy since it recites physically different extensions off the main rectangular face.

4. The applicant respectfully requests that the examiner amend claim 13. On lines 2 and 3, please change “forming rafter tabs, an extension of the bottom of said rectangular face, and a right angle bend forming a roof tab.” to “forming rafter tabs, one long end of said rectangular face extended in the same plane as said face forming an extension, and a right angle bend on the opposite long end of said rectangular face forming a roof tab.” Claim 13 now reads that one long end of the rectangular face is extended straight and the opposite long end has a right angled bend forming a roof tab. Therefore, amended claim 13 now reads over Tracy since it recites physically different extensions off the main rectangular face. Claims 1 and 13 now meet the 102 objections.

5. **In reference to claims 2-4, the rectangular face (36) has a predetermined length for accurately spacing apart rafters (16, 56) and a width creating a means for filling space between a top plate (18).** Tracy’s Fig. 7 shows how his upwardly extending tabs 40 are on each long dimension of his rectangular-shaped upper central portion 36. The applicant has already shown, and presented in the amended claims, that the present invention’s rafter tabs 44A and 44B are on each short dimension of the rectangular face. Tracy further states in column 3, lines 67-71, “A pair of upwardly extending tabs 40 are connected to the central portion 36 along bend lines 41 and such tabs have nail receiving openings 42 so that the bracket 35 can be secured to the lower portion of the rafter 18.” Therefore, Tracy’s anchor bracket 35 has his upwardly extending tabs 40 attached to each side of a singular rafter. In Tracy’s Fig. 1, his perspective view shows his anchor bracket 35 attached to individual rafters 18. Tracy’s Fig. 2 shows a side view of his anchor bracket 35 attached to a singular rafter 18. The applicant’s Fig. 14A and 23 A show the frieze

plate 42 attached to two adjacent rafters. By attaching to two adjacent rafters the applicant's invention accurately spaces apart adjacent rafters. Since Tracy's anchor bracket 35 is attached to individual rafters, they must be measured off by tape measures or other means. To clarify this, the applicant respectfully requests that the examiner amend claim 2. On line 2, please change "for accurately spacing apart rafters" to "for accurately spacing apart adjacent rafters". Amended claim 2 now reads over Tracy and meets the 102 objection.

6. The applicant has previously shown that Tracy's anchor bracket 35 is attached to individual rafters and cannot space apart adjacent rafters. Since Tracy's anchor bracket 35 is not attached to multiple rafters it cannot cover the space between adjacent rafters like the applicant's frieze plate 42. To clarify this, the applicant respectfully requests that the examiner amend claim 3. On line 2, please change "means for filling the space between rafters" to "means for covering the space between adjacent rafters". Amended claim 3 now reads over Tracy and meets the 102 objection.

7. Tracy's Fig. 2 shows a side view of his anchor bracket 35. Tracy's upwardly extending tabs 40 are shown attached to a singular rafter 18. Tracy's downwardly extending tabs 38 are shown attached to the front and back of a top plate 12, and his rectangular-shaped central portion 36 is shown on the top of the top plate 12. There is nothing connected to adjacent rafters nor is there anything connected between the roof and top plate. Tracy's Fig. 1 shows nothing between the rafter, roof or top plate. To make claim 4 more clear, the applicant respectfully requests that the examiner amend claim 4. On line 2, please change "means for filling the space between a top plate and roof" to "means for covering the space between a top plate and a roof". Amended claim 4 now reads over Tracy and meets the 102 objection.

8. **Regarding claims 6, 12, and 15, the bend tabs (38) have holes (39) as a means for attaching the apparatus (35).** Tracy's Fig. 2 shows a side view of his anchor bracket 35,

with his upwardly extending tabs **40** attached to a singular rafter **18**. Tracy show how his upwardly extending tabs **40** are extended straight up from the top plate **12**. The applicant's rafter tabs **44A** and **44B** are extended to the front, instead of straight up. This is a major physical difference that is stated in the applicant's claim 6. By having the rafter tabs **44A** and **44B** in front of the rectangular face, it makes attachment to the rafters much easier, especially from the exterior of a house. To make this physical difference and advantage more clear, the applicant respectfully requests that the examiner amend claim 6. On line 2, please change "toward the front face" to "toward the front face as a means for easy attachment from the exterior of a building." Amended claim reads over Tracy and meets the 102 objection.

9. Tracy's anchor bracket **35** attaches to a singular rafter and top plate. The applicant's frieze plate **42** attaches to the top plate and multiple rafters. This physical difference and advantage is stated in claim 12. To make it more clear, the applicant respectfully requests that the examiner amend claim 12. On lines 2-3, please change "building's roof trusses and rafters, outside sheathing, and underlying top plate as a means for preventing uplift, bowing in or out of walls, and lateral movement to a building" to "building's adjacent roof trusses and rafters, outside wall sheathing, and underlying top plate forming a strong connection between each structural member thereby preventing uplift, bowing in and out of walls, and lateral movement of a building". Amended claim 12 reads over Tracy and meets the 102 objection.

10. Tracy's patent has numerous embodiments for attaching rafters to a building, but nothing comes close to the applicant's invention. Tracy's complicated embodiments, shown in Figs. 4, 5, 6, 9, 10, 13, 23, and 24, appear to be able to attach to multiple rafters, but don't appear to be able to attach multiple rafters to the top plate like the applicant's invention. None of Tracy's embodiments attach to the roof sheathing like the applicant's invention. The applicant's claim 15 states these physical differences and the advantages. To make the claim clearer, the applicant respectfully requests that the examiner amend

claim 15. On lines 2-3, please change "of a building as a means for connecting said outside sheathing, said top plate, said rafter, and said roof together." to "of a building, thereby said apparatus having connecting means to said outside sheathing, said top plate, said rafter, and said roof, tying each structural unit together as a solid unit." Amended claim 15 reads over Tracy and meets the 102 objection.

11. **Regarding claim 8, Tracy discloses rounding the edges of tab member (28).** Tracy's rounded edges are on his double ridge bracket 19, shown on his Fig. 2, attaching the rafter 18 to the ridge plate 14. If he didn't round these edges his bracket would poke through the roof. Tracy's anchor bracket 35, that attaches a singular rafter 18 to the top plate 12, has no rounded edges. It is not obvious to round any edges on his anchor bracket 35, since it is installed from the top down. The applicant's frieze plate 42 is installed from the front to the rear, and rounded edges make the installation easier. To make this distinction more clear, the applicant respectfully requests that the examiner amend claim 8. On line 2, please change "as a means for easy installation on rafters" to "as a means for easy installation from the front, on rafters". Amended claim 8 reads over Tracy and meets the 102 objection.

12. **In reference to claim 9, the long end (LE) is at the bottom of the apparatus (35), see marked attachment.** The applicant's amended claim 1 now states that the extension is in the same plane as the rectangular face, which is physically different from Tracy's anchor bracket 35. To narrow claim 1, claim 9 is meant to show that the extension is on the lower long dimension. To show this more clearly, the applicant respectfully requests that the examiner amend claim 9. On lines 1-2, please change "said extension of said long end of said rectangular face is at the bottom." to "said extension in the same plane of said rectangular face is on the lower long dimension of said rectangular face." Amended claim 9 reads over Tracy and meets the 102 objection.

13. **Regarding claim 10, the extension (40) includes a plurality of holes (42) and has a**

face which acts as a means for attaching sheathing. Tracy's Fig. 7 shows his downwardly extending tabs **38** attached to the short dimension of his central portion **36**. The downwardly extending tabs **38** can only be extended down right below the rafter. These tabs **38** could not be extended to cover the top plate between rafters because they are constrained by the upwardly extending tabs **40**. Since the upwardly extending tabs **40** attach to either side of a singular rafter, they can not be extended to the side in order to for the tabs **38** to extend down between the opening between rafters. In order to make this distinction more clear, the applicant respectfully requests that the examiner amend claim 10. On lines 1-2, please change "wherein said bottom extension having a predetermined area as a means for covering wall sheathing" to "wherein said extension having a predetermined area as a means for extending below an opening between rafters on a house, thereby covering wall sheathing". Amended claim 10 meets the 102 objection.

14. **In further regards to claim 12 and claim 16, the apparatus also includes nails (unlabeled, as shown in Fig. 4) that aid in preventing uplift.** Tracy's anchor bracket **35**, shown in Tracy's Fig. 7 can definitely prevent a rafter **18** from lifting off a top plate **12**, as shown on his Fig. 2. But Tracy's anchor bracket has no means to prevent lateral or sideways movement, since the anchor can only be attached to a singular rafter. Therefore, Tracy's anchor does not prevent seismic movement on a building and amended claim 12 reads over Tracy and meets the 102 objection.

15. Claim 16 also reads over Tracy because of the fantastic way that the present invention can prevent seismic damage. To make this more clear, the applicant respectfully requests that the examiner amend claim 16. On lines 2-3, please change "underlying top plate, and roof as a means for preventing uplift" to "underlying top plate, and roof forming a strong connection between each structural member, thereby preventing uplift". Amended claim 16 reads over Tracy and meets the 102 objection.

16. **In reference to claim 14, the apparatus includes an attachment (40) on the opposite**

side of extension (40). The applicant's Fig. 14B shows the roof tab 38B bent at an angle from the top of the rectangular face 42A. The angle of the roof tab 38B is not stated in the specification, but is less than 90° in order to fit on a sloping roof. To make this more clear, the applicant respectfully requests that the examiner amend claim 14. On line 1, please change "wherein said right angle bend" to "wherein said acute angle bend". The acute angle bend is physically different from Tracy's anchor, and meets the 102 objection.

17. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 3,423,898 to Tracy et al. In view of USP 4,410,294 to Gilb et al...Gilb teaches that it is known in the art to provide a bracket with ribs (24).** Gilb's Fig. 1 shows that his embossments 24 provide strength to the material that is not supported against structural wood members. Gib's Figs 2 and 5 show a side view, where nothing is behind the metal embossments 24. It is common knowledge to put embossments or ribs in areas where there is no supporting structure behind them. The applicant's rectangular face covers the open space between adjacent rafters, the top plate, and the roof. Ribs provide resistance against lateral forces. Tracy's anchor does not span open spaces. All of Tracy's anchors are against the structural members and would not need embossments or ribs. To make the claim more clear, the applicant respectfully requests that the examiner amend claim 5. On line 2, please change "and stiffening when attached to a building." to "and stiffening over open spaces." Therefore, the applicant's amended claim 5 meets the 103 objection.

18. **Conclusion.** For all the reasons given above, applicant respectfully submits that the amended claims define over the cited reference under Section 102. The claimed distinctions are of patentable merit under Section 103 because of the tremendous results provided for a homeowner against earthquake and wind damage. Accordingly, applicant submits that claims 1-16 are now in full condition for allowance, which action applicant respectfully solicits. If the examiner agrees but does not feel that the present claims are technically adequate, applicant respectfully requests that the examiner write acceptable claims pursuant to MPEP 707.07(j).

19. Certificate of ~~faxing~~

MAILED Thomas C Thompson

I hereby certify that on the date below, I will fax this correspondence and attachments to group 3635 at the PTO at the following # (703) 872-9326

on 1/7/03 (Date) Signature: Computer generated, original signed by Thomas C. Thompson

Very respectfully,

Computer generated fax program, original signed by Thomas C. Thompson

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Amended Claims I claim:

1. An apparatus for securing sheathing and structural members of a building comprising:
 - a. a generally flat rectangular face;
 - b. generally right angled bends on each short end of said rectangular [shape] face;
 - c. said right angled bends forming rafter tabs;
 - d. [an extension of one long end of said rectangular face] one long end of said rectangular face extended in the same plane as said face, forming an extension.
2. The apparatus of claim 1 wherein said rectangular face having a predetermined length as a means for accurately spacing apart adjacent rafters and roof trusses on new construction.
3. The apparatus of claim 1 wherein said rectangular face having a predetermined length as a means for [filling] covering the space between adjacent rafters and roof trusses on existing buildings.
4. The apparatus of claim 1 wherein said rectangular face having a predetermined width as a means for [filling] covering the space between a top plate and a roof on a building.
5. The apparatus of claim 1 wherein said rectangular face having ventilation ribs as a means for ventilation and stiffening, [when attached to a building] over open spaces.
6. The apparatus of claim 1 wherein said rafter tabs having generally right angled bends bending said rafter tabs toward the front face, as a means for easy attachment from the exterior of a building.
7. The apparatus of claim 1 wherein said rafter tabs having a generally flat shape and a plurality of nail holes as a means for attachment to the wide side of adjacent rafters and roof trusses.

8. The apparatus of claim 1 wherein said rafter tabs having a predetermined area and generally rounded edges as a means for easy installation from the front, on rafters and roof trusses having variable roof pitches.
9. The apparatus of claim 1 wherein said extension in the same plane of said [long end of said] rectangular face is [at the bottom] on the lower, long dimension of said rectangular face.
10. The apparatus of claim 1 wherein said [bottom] extension having a predetermined area as a means for extending below an opening between rafters on a house, thereby covering wall sheathing and the underlying top plate of a wall.
11. The apparatus of claim 1 wherein said [bottom] extension having a plurality of nail holes as an attaching means to said wall sheathing and underlying top plate, thereby securing said extension to said wall, below the open space between adjacent rafters.
12. The apparatus of [the] claim 11 wherein said apparatus having attaching means to a building's adjacent roof trusses and rafters, outside wall sheathing, and underlying top plate [as a means for] forming a strong connection between each structural member, thereby preventing uplift, bowing in [or] and out of walls, and lateral movement [to] of a building during high winds and seismic events.
13. A frieze plate comprising a generally flat rectangular face, generally right angled bends on each short end of said rectangular [shape] face, said right angled bends forming rafter tabs, [an extension of the bottom of said rectangular face] one long end of said rectangular face extended in the same plane as said face forming an extension, and [a right angle] an acute bend on the opposite long end of said rectangular face forming a roof tab.
14. The apparatus of claim 13 wherein said [right] acute angle bend and said roof tab having

attachment on the long end of said rectangular face opposite said long extension.

15. The apparatus of claim 13 wherein said roof tab having a predetermined area, a plurality of nail holes, and having attaching means to the roof of a building, [as a means for] thereby said apparatus having connecting means to said outside sheathing, said top plate, said rafter, and said roof, tying each structural member together as a solid unit.
16. The apparatus of claim 15 wherein said apparatus having attaching means to a building's adjacent roof trusses and rafters, outside wall sheathing, underlying top plate, and roof [as a means for] forming a strong connection between each structural member, thereby preventing uplift, thrusting, and lateral movement of a building, during high winds and seismic events.